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ALBERTA PROVINCIAL SCHOOLS OF AGRICULTURE

CALENDAR FOR 1926-1927

Issued by Direction of

HON. GEORGE HOADLEY

Minister of Agriculture

EDMONTON:
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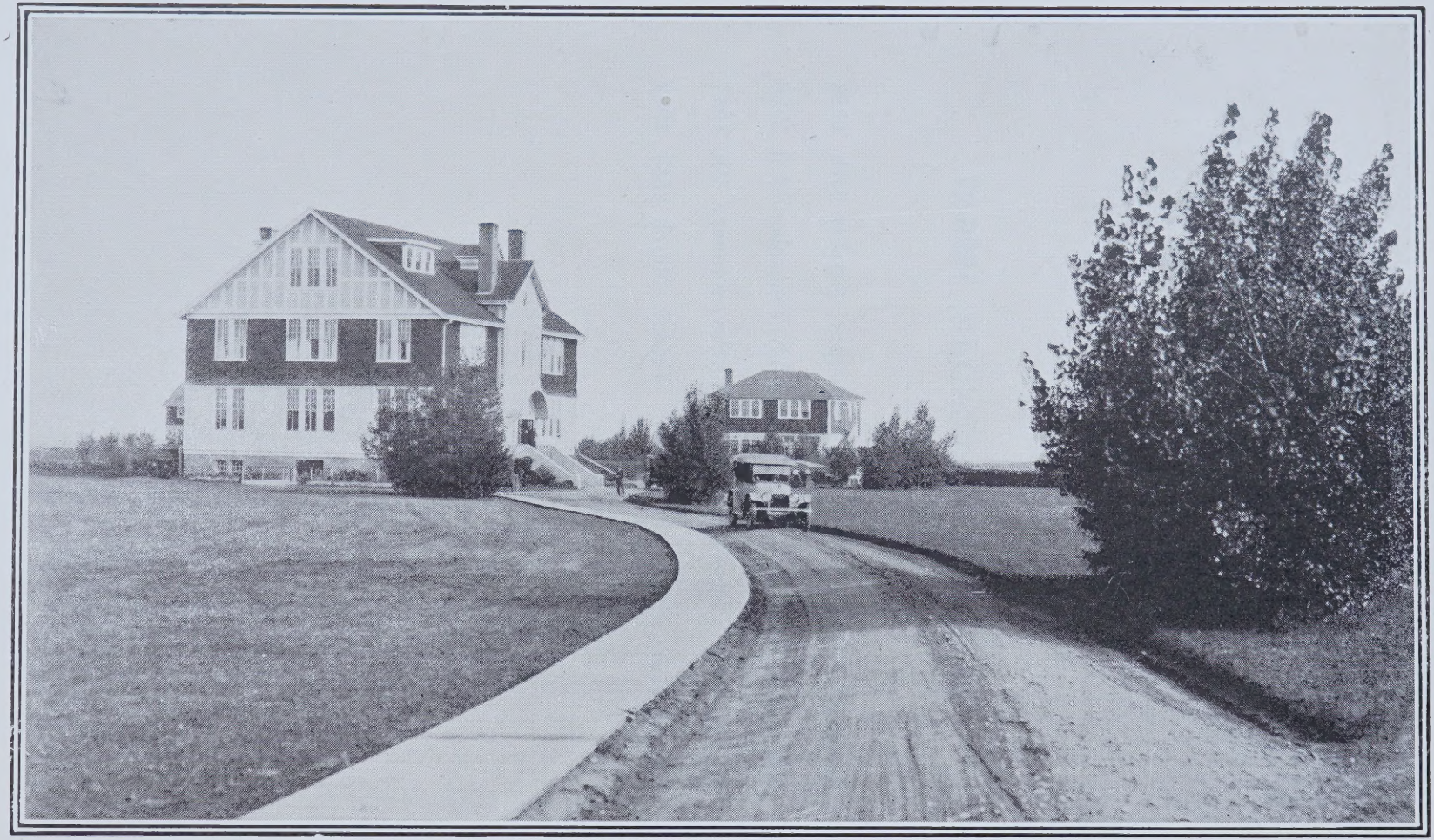
1926

ACADEMIC CALENDAR, 1926-27

School Commences - -	Wednesday, October 27th, 1926
Christmas Vacation - -	Thursday, December 23rd, 1926
Spring Term Commences -	Tuesday, January 4th, 1927
Spring Term Ends - - -	Friday, March 25th, 1927



Agricultural School Buildings, Claresholm

TEACHING STAFF

CLARESHOLM SCHOOL

S. H. GANDIER, B.S.A.,
Principal, Instructor in Science

W. M. COCKBURN, B.S.A.,
Farm Manager, Instructor in Animal Husbandry

W. J. WELKER, B.S.A.E.,
Instructor in Farm Mechanics

E. G. BAYFIELD, B.S.A., M.Sc.,
Instructor in Field Husbandry

W. S. BENN,
Instructor in English and Mathematics

MISS MARY HALL, B.Sc.,
Instructor in Home Economics

MISS C. MCINTYRE,
Instructor in Home Economics

MISS G. GIRLING, R.N.,
Instructor in Home Nursing

DR. P. R. TALBOT, D.V.S., Provincial Veterinarian
Instructor in Veterinary Science

DR. C. E. BUCHANAN, V.S.,
Instructor in Veterinary Science

J. W. HOWE, B.S.A.,
Instructor in Dairying

E. E. EISENHAUER, B.S.A., B.Sc., C.E. and I.E.,
Instructor in Irrigation

Staff and Students, 1925-26, Vermilion

TEACHING STAFF

OLDS SCHOOL

F. S. GRISDALE, B.S.A.,
Principal, and Instructor in Field Husbandry

C. A. WEIR, B.S.A.,
Farm Manager, and Instructor in Animal Husbandry

G. R. HOLETON, B.Sc.,
Instructor in Mechanics

C. E. YAUCH, B.Sc.,
Instructor in Science

ROBERT E. STEWART, B.A., M.A.,
Instructor in English and History

E. L. CHURCHILL, B.A., M.A.,
Instructor in Mathematics

A. T. KEMP, B.S.A.,
Instructor in Biology and Horticulture

MISS BERTHA EDGAR, B.H.Ec.,
Instructor in Home Economics

MISS M. S. EDWARDS, B.S.A., B.H.Ec.,
Instructor in Home Economics

MISS M. KOCHER, R.N.,
Instructor in Home Nursing

DR. C. H. H. SWEETAPPLE,
Instructor in Veterinary Science

L. H. FOSTER, B.S.A.,
Instructor in Dairying

E. E. EISENHAUER, B.S.A., B.Sc., C.E. and I.E.,
Instructor in Irrigation

Arrangements have been made with the following gentlemen to give special lectures along their respective lines of work at the schools:

Dr. H. M. Tory,
President, University of Alberta

H. A. Craig, B.S.A.,
Deputy Minister of Agriculture

E. A. Howes, B.S.A.,
Dean, Faculty of Agriculture, University of Alberta

S. G. Carlyle,
Livestock Commissioner

Dr. C. P. Marker,
Provincial Dairy Commissioner

Other lecturers will visit the schools as arrangements are made from time to time.

GENERAL INFORMATION

The work of the Schools of Agriculture is divided into two main divisions, viz.: Agriculture and Household Science. The work of the former department is organized specially from the point of view of the practical farmer, and in the latter department from the point of view of the home-maker.

Agriculture

The two-year course in Agriculture is outlined with the aim of preparing those taking the course better to cope with practical problems which face the western farmer. Special emphasis is laid on the work of Animal Husbandry, Field Husbandry, and Farm Mechanics, including actual practice in Blacksmithing and Carpentry. The instruction in Agricultural Physics, Chemistry, Bacteriology, Farm Management, and Bookkeeping is handled so as to develop practical application of these in farm operations. The courses in Mathematics and English are designed to bring the graduates of the schools to an academic standard such as will enable them to compete with those who have had higher educational advantages. Entomology and Botany are taught to familiarize the students with insect and weed pests, and the best means of eradicating them.

There is little difference between the lists of subjects covered in the first and second years of the course. Second year work deals in a more advanced way with the same subjects, and also covers phases which are not touched in the more elementary study. Regular students are entitled to begin the second year when they have covered successfully the first year course. Under the existing regulations students with Grade XI standing may enter the second year of the course, but must show satisfactory knowledge of the work of the first year before being granted a diploma. On satisfactory completion of the two years, students are awarded the diploma from the Department of Agriculture.

Home Economics

The aim of the Department of Home Economics is to train the young women of the Province in the activities of the home as performed by the wife and mother in the home. A practical course is given in the vocation of home-making.

The course covers a period of two sessions of five months each. The work in the first year is planned primarily for those who have

Staff and Students, 1925-26, Olds School of Agriculture

only one year to spare. Through the correlation of subjects related to Home Economics conducted on practical lines, the course aims to secure the economic management of the home and to raise the standards of home-making as a profession.

The work of the second year is a continuation of the home-maker's course, with special emphasis on problems in Dietetics, House Furnishings, and Costume Design.

The completion of two years' work at one of the Schools of Agriculture forms the foundation for those who wish to go on with the course in Home Economics at the University, providing the students have the necessary academic standing.

Entrance to University

Students from the Provincial Schools of Agriculture will be admitted to the Second Year Agriculture and Domestic Science upon presenting matriculation certificate, and a certificate of qualification in Domestic Science or Agriculture from any of the Provincial Schools of Agriculture, if recommended to the University by the Staff of the Agricultural School from which they have graduated.

Third Year or Special Matriculation Course

Provision has been made for a third year in the Agricultural School Course. The course is for students who have taken the regular two years' work in Agriculture or Domestic Science in one of the agricultural schools. This third year will be of very outstanding value to many of the students who enter the agricultural school courses with low academic standing, as it will provide them with a means of matriculating in the High School subjects in the shortest possible period of time. In academic standing the student graduating from the third year agricultural course will enter the University with scholastic standing equivalent to students who enter from the High School and with the additional advantage of having one year of their University course covered before entering.

This course is being put on at the School of Agriculture, Olds, only, for the time being. The students who have taken either of the two-year courses at any of the Agricultural Schools are allowed to enter the third year at the O.S.A.

The course will open October 19th, 1926, and will close in May, 1927.

The course will be free, and is open to students who have received a diploma from one of the Agricultural Schools.

Students taking the matriculation course will write examinations conducted in May under the control of the Department of Education and University Matriculation Examinations Board.

The subjects of examination are:

1. English Composition.
2. English Literature.
3. History (General and Canadian Constitutional).
4. Arithmetic.
5. Algebra.
6. Geometry.

For further particulars apply to School of Agriculture.

Admission Requirements to Schools of Agriculture

1. The minimum age of admission to the schools for boys and girls is sixteen.

2. No entrance examination is required. The student must possess the knowledge and ability to profit by the work of the school.

3. The student must produce satisfactory evidence of moral character and physical health, when requested by the Principal.

4. The school course is entirely free; but every student is required to make a deposit of $5.00 caution money to cover damage to furniture, apparatus, books, etc. The amount (less deductions, if any) will be refunded at the end of the session.

Text-books can be secured at the schools.

Examination Standards

The final year standing shall be arrived at by taking 60% of the term standing and 40% for final examinations. Forty per cent constitutes a pass in each subject, but students are required to obtain a 50% standard on the average. Sixty per cent constitutes second class honors, and 75% constitutes first class honors.

Regulations

Smoking is not allowed on the school premises.

Students will not be permitted to board in hotels, and all boarding houses must be approved by the Principal.

Provision is made for the social life of students. This is wholly under control of the Principal.

Students are expected to attend religious service once each Sunday, in such church as is prescribed by parent or guardian.

Students must devote a reasonable amount of time to evening study. In the matter of disposal of leisure time, the students are responsible to the Principal.

Regular and punctual attendance at lectures and laboratory periods is required of each student. No student will be permitted to take the final examinations in any course if his absences exceed ten periods in courses of three periods a week throughout the session, six periods in courses of two periods a week, and four periods in courses of one period a week.

Students will not be allowed to frequent pool rooms. Violation of this rule will be followed immediately by suspension from classes.

Dormitory accommodation for women students. For particulars, write the Principal.

British Boys in Training at Claresholm School of Agriculture, 1925-26. Similar Groups were Trained at the other Two Schools

PRIZES OFFERED FOR COMPETITION DURING SESSION 1926-27

Claresholm School of Agriculture:

The P. Burns prize of $50.00, offered by P. Burns, Esq., of Calgary, for competition in the Department of Agriculture at the Claresholm School.

The P. Burns prize of $50.00, offered by P. Burns, Esq., of Calgary, for competition in the Department of Home Economics at the Claresholm School.

General Proficiency, Second Year Agriculture—Silver Medal. In awarding this medal, the student's activity in the athletic, social, and literary phases of school life will be considered, in addition to examination standing.

General Proficiency, Second Year Home Economics—Silver Medal. This medal is awarded under same conditions as preceding one.

General Proficiency, First Year Agriculture—Prizes valued at $8.00 and $4.00, donated by the Calgary Herald. Award of these prizes will be made in accordance with results of final examinations.

Essay on "The Place of Corn and Sweet Clover in Crop Rotations in the Wheat Belt of Southern Alberta"—Two cash prizes of $15.00 and $10.00, donated by the Lethbridge Herald. Essays must be of sufficient merit for publication, otherwise prizes are withheld.

Competition in the identification and grading of varieties of grain and small seeds, open to both first and second year students—Cash prizes of $7.00, $5.00, and $3.00, donated by the Alberta Pacific Grain Company.

Highest standing in Field Husbandry.

Second Year—First prize: 3 bushels registered Marquis Wheat. Second prize: 2 bushels registered Marquis Wheat.

First Year—First prize: 2 bushels Garnet Wheat or Kharkov M.C. 22 Fall Wheat. Second prize: 1 bushel Garnet Wheat or Kharkov M.C. 22 Fall Wheat.

In awarding these prizes, all classroom and term work will be considered in addition to results of final examinations.

entering the school for the second term. If the student winning same does not return for a second year, the prize passes to the student standing next highest.

The Edmonton Stock Yards Company has offered a $50.00 scholarship for the best general judge of livestock. The scholarship is to be paid under the same conditions as govern each of the P. Burns & Co.'s scholarships.

Allen Gillies of Clover Bar offers a high class Yorkshire gilt to the best judge of hogs, covering the work of the first term.

The T. Eaton Co. offers a prize of five sets of its "T. Eaton Co. News Service," which is a digest of agricultural and household science material applicable to Western Canada. These are offered to the five boys ranking highest in general proficiency.

Prizes Offered in English and Mathematics, 1926-27

Highest term standing in English, to include Public Speaking and Debating:

Second Year—Prize valued at $5.00.

First Year—Prize valued at $5.00.

Highest term standing in Mathematics:

Second Year—Prize valued at $5.00.

(Prizes open to students of both Agriculture and Home Economics.)

The T. Eaton Co. also offers five prizes similar to the above to the five girls standing highest in general proficiency.

The Staff of the Vermilion School of Agriculture offer a cash prize of $10.00 to the student standing highest in all round school activities, including written work and practice work. Social, athletic and literary activities will be considered in awarding this prize.

The Instructor in Science, Mr. W. R. Brown, offers three prizes of $5.00, $3.00 and $2.00 for the best collection of properly pressed weeds ready for mounting, made between the first and second years.

The Vermilion School Magazine offers three prizes of $5.00, $3.00 and $2.00 for the three best short essays suitable for use in the magazine.

The Instructor in Sewing, Miss Alexander, offers a prize for the best term work in sewing.

The Instructor in Cooking, Miss Fern Edwards, offers a prize for the best term work in practical cooking.

SCHOLARSHIPS BY THE DEPARTMENT OF AGRICULTURE

Announcement is made by Hon. George Hoadley, Minister of Agriculture, of a plan for special scholarship courses at the schools of agriculture at Vermilion, Olds and Claresholm. The plan involves the granting of free courses for one term at the schools of agriculture, to young farm people under special conditions.

School Fair Winners—At present the province is divided into three school fair districts, each attached to one of the schools of agriculture, and in these districts the boy and girl prize winners in each school fair are sent to their respective school of agriculture for a special scholarship course of one week. This plan has been in operation for three or four years and has been very successful.

Under the new plan announced by Mr. Hoadley, a special examination will be set for the boys and girls attending the scholarship short courses, and a term at each School of Agriculture will be provided the boy and girl taking the highest marks in this examination during the scholarship courses at each of the schools.

Young Farm People—The plan also includes a term scholarship at one of the schools of agriculture for the boy and girl winners of special examinations set during the young farm people's course, held each summer at the Alberta University.

Girls' Clubs—With respect to the Girls' Clubs of the Women's Institutes, an examination will be set for the members of these clubs, and the winner will be granted a one-term scholarship in home economics at one of the schools of agriculture.

The scholarships will include payment of one railway fare and return to the agricultural school from points within the province, also payment for board and lodging during the school term and a maximum of $10.00 for text books.

The scholarships will be effective when the boy or girl reaches the age of 16 years, which is the minimum age requirement for students entering the schools of agriculture.

AGRICULTURE

Courses of Study

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DETAILS OF COURSES

Animal Husbandry

First Year

(*a*) *Food Nutrients and Digestion*—Ten lectures during term.

A brief outline, merely sufficient to enable the students to grasp the essential differences between the care and feeding of fattening, growing, milking, and pregnant animals.

The chief groups of food nutrients found in plants, their composition and uses in the animal body.

Digestive systems of ruminants and non-ruminants; passage of food through the digestive tract. Digestion and assimilation.

(*b*) *Necessity for Livestock*—Two lectures during term.

Livestock essential to permanent agriculture in the Province. Suitability of the various parts of the Province to the different types of livestock.

(*c*) *Care and Management*—Twenty lectures during term.

General discussion of the most satisfactory methods of handling livestock.

Care and attention required by the various types of stock.

General feeding, quantities, kinds of feed and when to feed it.

Watering, watering systems, etc.

Desirable farm building, sanitation, ventilation, amount of glass, floors, types of construction.

(*d*) *Marketing Livestock*—Two lectures during term.

Central markets, drovers, co-operative shipments, etc.

Necessary margin on fattening stock.

Market classes, shrinkage, shipping, age at which to sell.

(*e*) *Livestock Judging*—Thirty-four laboratory periods during term.

Laboratory work on market and breeding classes of all types of livestock (horses, beef and dairy cattle, sheep and swine). Explanation of what makes for good type in all the different kinds of animals. Weighing out given rations. Trimming sheep and cattle for showing. Oral discussion of all classes by students.

(*f*) *Brand Regulations.*

Students to be encouraged to purchase Plumb's "Judging Farm Animals," "Feeds and Feeding," by Henry and Morrison, and Toole's "Book of Livestock."

(*a*) *Breed History*—Twelve lectures during term.

Characteristics of all of the popular breeds of livestock. Their appearance, strong and weak points, and their peculiar adaptabilities.

Discussion of the origin and history of the popular breeds of horses, cattle, sheep, and swine, and mention of the less well known breeds.

Mention of the present day outstanding individuals in each breed and of the best known breeders.

(*b*) *Feeding*—Twenty-five lectures during term.

Resume of the elementary principles covered in the first year. Composition and feeding values of the common available feeds. Feeding standards and their uses.

Compilation of rations. Students to be given a number of rations to be worked out, emphasizing the relative value of different feeds from a cost standpoint.

Detailed discussion of the feeding of different animals under all circumstances, particularly emphasizing the feeding of growing animals, dairy cows, fattening steers, and working horses.

(*c*) *Principles of Breeding*—Five lectures during term.

Possibilities in livestock improvement.

Variability of all living matter.

Influence of selection.

Line breeding and inbreeding, concentration of blood lines (advantages and disadvantages).

Pure bred, cross bred, and grade stock. The place of each.

Elimination of scrub stock.

The importance of an ideal and a constructive policy in the mind of the breeder.

(*d*) *Livestock Records and Registration*—One lecture during term.

1. Judging of breeding classes, of the various breeds, so as to familiarize the students with the best types of each breed.

2. Practical work with pedigrees.

3. Actual preparation of stock by students for a fair, and the staging of a miniature stock show.

Botany

First Year

One lecture, one laboratory period per week.

1. Economic value of plants for food, forage, etc.

2. Seed germination, controlling influences.

3. The plant, vegetable parts and their functions, respiration, transpiration, photosynthesis, osmosis.

4. Classification of plants.

5. The inflorescence, different types. Flower, its parts and their functions.

6. Identification of weeds and weed seeds.

7. Identification and control of rusts and smuts.

Second Year

1. Examination and study of students' collections.

2. The outstanding characteristics of economic plants belonging to the following families: Mustard, Canada thistle, grass, beet, carrot, and rose.

3. Identification of weeds and weed seeds.

4. Plant ecology, ecological factors, classification of plants according to water supply.

5. Morphology, the plant cell, the stem of monocotyledons and dicotyledons.

6. Elements essential to plant life, water cultures, and sand cultures.

7. A brief discussion of:
   (*a*) The Theory of Evolution;
   (*b*) Mendel's Law;
   (*c*) De Vries' Law.

8. Life history and identification of rusts, smuts, mildews, wilts, blights, and scab.

9. Methods of applying the following fungicides:
   Bichloride of mercury;
   Bordeaux mixture;
   Copper sulphate;
   Copper carbonate dust;
   Formalin.

Reference: "Agricultural Botany," by Percival.

Bacteriology

Second Year Only

One lecture per week

1. Position of bacteria in the organic world.
2. Form, size, structure, and motility.
3. Reproduction, spore and formation.
4. Conditions influencing bacterial growth:
   (*a*) Physical—Temperature, moisture, air, light, pressure;
   (*b*) Chemical—Food, kind and amount;
   (*c*) Biological—Relation to other organisms, symbiosis.
5. Bacteria in the air; dust and its effect on health.
6. Bacteria in relation to water:
   (*a*) Contamination of water in different ways; purification of water;
   (*b*) Bacteria in different types of wells.
7. Bacteria in milk and its products:
   (*a*) Milk as a medium for bacterial development;
   (*b*) Sources of bacteria in milk;
   (*c*) Prevention of contamination and the production of clean milk;
   (*d*) Disease bacteria in milk;
   (*e*) Bacteria in butter-making and cheese-making.
8. Bacteria in relation to septic tanks.

For Students in Agriculture

9. Bacteria in relation to soil fertility:
   (*a*) Numbers and distribution in soil;
   (*b*) Relation to humus and decomposition of organic matter;
   (*c*) Transformation of soil nitrogen;
   (*d*) Inoculation of seed for the growing of legumes;
   (*e*) Relation of bacteria to available plant food.
10. Bacteria in relation to silage.

For Household Science Students

11. Relation of bacteria to preservation of food, canning, drying, pickling, salting, smoking.
12. Micro-organisms in bread-making.
13. Vinegar-making.

Reference books: "Microbiology," by Marshall; "Bacteria in Relation to Country Life," by Lipman.

Chemistry

First Year

Two lectures and one laboratory period per week

1. Physical and chemical changes. Indestructibility of matter. The place of chemistry in agriculture and home economics.
2. Elements; compounds; mixtures; symbols.
3. Oxygen; oxidation; combustion; ozone.
4. Hydrogen; reduction.
5. Water and hydrogen peroxide. Analysis and synthesis.
6. The atomic theory.
7. Formulae, equations, chemical problems and calculations.
8. Nitrogen; the atmosphere.
9. Solutions; electrolysis; ionization.
10. Acids; bases; neutralization; salts.
11. Valence.
12. Nitrogen compounds, ammonia, nitric acids, etc.
13. Sulphur and compounds of sulphur.
14. The periodic law; the chlorine family.
15. Phosphorus: matches; arsenic.
16. The metals; sodium; potassium; baking soda; washing soda.
17. Calcium and its important compound; lime, mortar.

Text: McPherson & Henderson, "First Course in Chemistry."

Second Year

Organic Agricultural Chemistry

Two lectures and one laboratory period per week

1. The element of carbon, its occurrence and inorganic compounds.
2. Organic Chemistry, its importance and definition.
3. The paraffin series of hydro-carbons, their constitution and structure. The petroleum and paraffin industry; natural gas.
4. The halogen derivatives of the paraffins. Synthesis of higher hydro-carbons.
5. Isomerism. Substitution products.
6. Alcohols. Monohydroxy, dihydroxy, and trihydroxy, derivatives; fermentation. Nitro-glycerine, dynamite and cordite.
7. Aldehydes.
8. Acids. Fatty acids series. Polybasic acids.
9. Review of the paraffins, alcohols, aldehydes, and acids, and their relationships.

10. Ethers and ethereal salts. Esterification.

11. Fats, hydrolysis and saponification. Soaps. Butter and its substitutes. Hydroxy and amino acids.

12. Proteins, their relation to amino acids, properties, and importance as foods.

13. Carbo-hydrates, their classification and importance. Sugars, starches, dextrin, and cellulose. Gun cotton.

14. Enzymes, their functions and importance in fermentation, butter, cheese-making, and bread-making, and digestion.

15. Utilization of the essential elements and their functions; foodstuffs.

16. Digestion, absorption and metabolism.

17. Comparison of plants and animals. Photosynthesis.

18. Composition of crops and their food values.

The course in agricultural chemistry deals with systematic organic chemistry, in so far as that is necessary to understand the most important organic compounds. Special emphasis is laid upon the three main classes of organic foodstuffs (carbo-hydrates, proteins, and fats), their usefulness and place in the plant and animal body. Tests for the identification of carbo-hydrates, proteins, and fats will also be made.

Qualitative Analysis

Simple qualitative analysis will be studied and chemical tests performed for the identification of the following acid radicals and more common metals: Carbonates, sulphates, nitrates, chlorides, phosphates, sodium, potassium, magnesium, calcium, ferrous and ferric iron.

Text: "Organic Agricultural Chemistry," Chamberlain.

Civics

Second Year Only

One lecture per week

Municipal Organization—The basis of community organization, primitive and modern. Careful study of community organization represented in the services and powers of local improvement districts, rural municipalities, villages, towns, and cities, school districts, rural school consolidations, fairs and exhibitions. The discussion of selected portions of empowering legislation with respect to these; duties and privileges of citizens under this legislation; official bodies. Brief reference to organizations of a voluntary kind not established by government sanction, such as church, social and patriotic organizations, associations for production, purchasing and marketing.

Provincial Government—Studied primarily through services furnished by administrative departments; railways and telephones, public works, municipal affairs, agriculture, education, attorney-general, treasury, provincial secretary, and public utilities commission; special emphasis on department of agriculture and education. The Alberta Act; constitution of the Provincial Government, lieutenant-governor, legislative assembly, and executive council; qualifications of voters and members of the legislature; elections.

Dominion Government—Services of the Dominion Government closely affecting agriculture. Division of powers between Federal and Provincial Governments; basis of division, subjects of concurrent jurisdiction. The constitution of the Dominion Government, governor-general, senate, house of commons, and executive council. Qualifications of members and voters; elections.

Reference: "How Canada is Governed," by Bourinot.

Farm Dairying

SECOND YEAR

(*a*) *Milk Production*—The composition and sanitary production of milk; the care and handling of milk and cream; the separation of cream and the use of the centrifugal cream separator; the marketing of milk and cream for direct consumption and for manufacturing into cheese and butter; the provision and arrangement for cooling material and cooling facilities on the farm.

(*b*) *Milk-testing*—The principle and use of the Babcock Test; the testing of milk and cream for butter fat. The keeping of records of the quantity and butter fat test of the milk production of individual cows and the utility of such records.

(*c*) *Butter-making*—The handling of cream for butter-making; the churning, salting, working, packing and marketing of butter under farm conditions.

(*d*) *Cheese-making*—The making of cheese in the home dairy.

(*e*) *Legislation*—The legal standards and other provisions which apply to the production and marketing of dairy products from the home dairy.

English

FIRST YEAR

Two periods of 40 minutes; 34 periods during the term

1. *Capitalization and Punctuation*—Use of period, comma, interrogation and exclamation marks, semicolon, colon, apostrophe, and quotation marks. Numerous exercises in punctuation, spelling, and writing. Careful correction of all errors in speech and written work. Every lesson a language lesson.

2. *The Sentence*—Form of simple sentences, statement, question, exclamation, and command. Simple, complex and compound sentences. Oral and written exercises on sentence structure. Correction of faulty sentences and grammatical errors.

3. *The Paragraph*—The topic statement and its development into the paragraph. Unity and coherence in the paragraph. Study of simple paragraphs, illustrating paragraph development. The outline or paragraph plan. Value of paragraphing. Exercises on familiar topics.

4. *The Whole Composition*—Connecting of paragraphs or continuity, unity, coherence and clearness in composition. Numerous composition outlines and exercises.

5. *Correspondence*—Letter forms, business letters, friendly letters, social letters, advertisements, telegrams.

6. Use of dictionary and reference works.

7. Public speaking.

Literature: Seventeen 40-minute periods.
Poetry: Longfellow's "Evangeline."
Prose: Dickens' "Christmas Carol."
Home Reading: Stevenson's "Treasure Island."
Scott's "Ivanhoe."

Second Year

Two periods of 40 minutes, 34 periods during term.

1. Review of composition of first year.

2. *The Sentence*—Study of it in relation to form and grammatical structure. Study of rhetorical values of sentences. Unity, coherence and emphasis in sentences and how or how not secured.

3. *The Paragraph*—Critical study of the paragraph, exercises on paragraph planning and writing. Careful correction of all exercises. Values of unity, coherence and emphasis in paragraphs. Lengths of paragraphs.

4. *The Whole Composition*—Narration, description, exposition and argument. A study of each with plans and exercises. Two written exercises a week should be handed in during the term.

5. *Words*—Study of selection and use of words. Homonyms, synonyms and antonyms in brief.

6. *Public Speaking and Debating*—

Literature: Seventeen 40-minute periods.
Scott: "The Lady of the Lake."
Eliot: "Silas Marner."
Home Reading: Parker, "The Seats of the Mighty."
Grayson, "Adventures in Contentment."

Entomology

One lecture and one laboratory period per week during term

1. Place of the insect in the animal kingdom:
   (*a*) Difference between insects and their near relatives.

2. *Anatomy*—Head: Biting and sucking mouth parts. Thorax and abdomen: Circulatory, respiratory and alimentary systems.

3. *Classifications*—Important economic orders: Bugs, flies, moths, and butterflies, beetles, grasshoppers and bees.

4. Life history of cutworms, wireworms, Hessian fly, western wheatstem saw fly, potato beetle, warble-fly, horse fly, house fly, plant lice, red-backed turnip beetle, grasshoppers, beet web-worm and leaf-eating beetles.
   (*a*) Near relatives of insects, such as ticks, mites and fleas

5. *Insecticides*—Poisoned Bordeaux Mixture, Paris green water, hellebore, pyrethrim, kerosene emulsion, whale oil soap, arsenate of lead, hydrocyanic acid gas, carbon disulphide.

Farm Management

First Year

One lecture per week

1. History of Agriculture.

2. Types of farming and factors governing type, specialized and general, intensive and extensive, exploitive and restorative.

3. Choosing a farm, location, soil, climate, precipitation, vegetation, improvements and their value.

4. Various forms of tenure, share and cash renting, owning.

5. Farm lay-out.

6. Farm cost accounting, its value, inventory, farm accounts, receipts, expenditures, summary of year's business, profit and loss.

7. Estimation of income tax.

Farm Management and Economics

Second Year

Two lectures per week

1. Evolution of types of agriculture, self-sufficing, commercial, scientific.

2. Fundamental nature of agriculture in relation to manufacturing, transportation, merchandising.

3. Factors in production:
   (*a*) Land, large and small farms, cheap and expensive land, diminishing returns.

(*b*) Labor, influences affecting cost, efficiency, permanency, etc.

(*c*) Capital, sources of capital, loans, mortgages; organized credit, permanent, and operating; amount required in various types of farming.

4. Production, relation of cost of production to value, market value, supply and demand, cycles in agriculture.

5. Labor income, effect of the size of the farm business, yearly supply of labor, economic arrangement of crops with regard to maximum use of horses and machinery; balance between cash crops and livestock, animal units; production per animal, crop yield, diversity.

6. Commercial paper, drafts, mortgages, deeds, wills, contracts, notes, abstracts, cheques, money orders, etc.

7. Insurance—Life, fire, accident, hail, and disease.

8. Bank credit. Canada Banking Act.

9. Analysis of some successful farmer's business.

10. Marketing and co-operation.

Field Husbandry

First Year

Eight lectures during term

(A) *Soils and Soil Cultivation*—

Origin and classification of soils, relationship of texture, moisture, temperature, color, and bacteria to the producing powers of the soil; the objects of cultivation; methods of cultivation for different soils under varying climatic and seasonal conditions; the use of various farm implements used in cultivation.

(B) *Cereal Crops*—Fourteen lectures during term.

Methods of improvement:

(*a*) Their classification and history. The plant and how studied from the standpoint of composition, structure, heredity, environment;

(*b*) The study of wheat, oats, barley, and flax under the following heads:

1. Special structure.
2. History.
3. Soil and its amendment.
4. Adaptability to climatic conditions.
5. Suitable varieties.
6. Selection and treatment of seed.
7. Dates of seeding.
8. Rates of seeding.

9. Depth of seeding.
10. Methods of seeding.
11. Tillering and method of modification.
12. Cultivation of growing crop.
13. Period of maturity at time of cutting.
14. Method of harvesting, stooking, stacking and threshing.
15. Storing and Marketing.

(C) *The Eradication of Weeds*—Five lectures.

What a weed is; classification of weeds; losses due to weeds; how weeds spread; general principles in the control and eradication of weeds; method of eradication.

(D) *Drainage*—One lecture.

(E) *Outline of Experimental Work Conducted at the School in Field Crops*—One lecture.

(F) *Seed Selection*—Two lectures.

Laboratory Exercises

Two laboratory periods per week during term

1. A complete study of the physical structure of wheat, oats, barley, and flax plants.

First Year Students in Agronomy Class, Vermilion

2. A study of variety characteristics in wheat, oats, barley and flax.

3. *Judging Field Crops*—Commercial judging and handling of grains, grasses, forage and root crops.

4. *Judging Seed Grain*—The student will be made familiar with the score card in judging seed grain; practice is given in scoring, comparing, judging, and selecting seed grain.

SECOND YEAR

(A) *Farm Crops*—Fifteen lectures during term.

A concise review of first year's work. In addition, spring and fall rye, rape, kale, buckwheat, millets, and vetches.

(B) *Grasses, Clovers, Alfalfas, Forage and Root Crops*—

In this course a few of the varieties of grasses, clovers, forage, ensilage and root crops best adapted for general culture in various parts of the Province will be studied in a manner similar to that adopted with cereals.

(C) *Fertilizers*—Four lectures during term.

Farm yard manure, its properties, source, value, care, application, and economy. Green manuring.

(D) *Seed Selection*—Three lectures during term.

Value of seed selection, method used in developing pedigreed seed, and a brief outline of the work of the Canadian Seed Growers' Association; Seed Control Act.

(E) *Rotation of Crops*—Three lectures during term.

(1) Rotation defined.
(2) Reasons for rotating crops.
(3) Rotation suitable to grain farming, to mixed farming.

(F) *Eradication of Weeds*—Three lectures during term.

A continuation of the work of the first year.

Judging and grading grains and grasses. Work of first year continued in judging with score card. Practice in selecting and comparing grass, clover, and alfalfa seed, and in grading market wheat, oats, barley, peas and flax.

Horticulture

FIRST YEAR

Twenty-four lectures during term

(*a*) *Vegetable Culture*—Fourteen lectures.

A study of the soil, fertilizing and cultural requirements of the leading vegetable crops and the best methods of harvesting, storing, and marketing same. It embraces the construction and management

of hot beds and cold frames, the control of insects and diseases common to those crops and the methods followed for the improvement of various vegetable crops in order to secure desirable types.

(*b*) *Small Fruits*—Six lectures.

A study of the origin and evolution of the different small fruits: Saskatoon, cranberry, strawberry, gooseberry, blackberry, currant, and raspberry; soil and cultural requirements; the various phases of their management from the selection of plants to the harvesting of crop is dealt with.

(*c*) *Forestry*—Four lectures.

Elementary principles of tree-planting; wind-breaks, ornamental trees and shrubs.

SECOND YEAR

One lecture per week during term

(*a*) *Amateur Floriculture*—Five lectures.

Elementary instruction in the care and management of some of the leading house plants; annual and perennial plants; bulb culture.

(*b*) *Plant Propagation and Improvement*—Three lectures.

A study of the science and art of multiplying plants from seed and vegetable parts. The sowing of seeds and the study of their requirements during germination. Separation and division. Layering cuttings and grafting will be treated specifically.

(*c*) *Elementary Forestry*—Seven lectures.

The growing of trees and shrubs in wind-breaks, wood lots and for ornamental purposes.

(*d*) *Elementary Landscape Gardening for Farmsteads*—Two lectures.

Irrigation

FIRST YEAR

Thirty lectures during term

1. History with special attention to Canada.
2. Terms used.
3. Sources of supply.
4. Irrigation implements and structures.
5. Crops and increased returns.
6. Methods of application.
7. Location of farm ditches.
8. Cereals.
9. Grasses and alfalfa for hay and pasture.
10. Weeds, soil drifting, insect control, and alkali.
11. The farm unit and the farm home.

Second Year

Twenty-four lectures during term

1. Water-shed and run-off.
2. Measurement and measuring devices.
3. Duty of water.
4. Dominion and Provincial irrigation laws.
5. Operation and maintenance of irrigation systems.
6. Farm reservoirs, and water purification.
7. Leveling.
8. Ditch construction.

Practical work to cover location and making of ditches to be given in first and second years when possible.

Mathematics

First Year

Three lectures a week during term

(*a*) Review with drill to emphasize accuracy; addition, subtraction, multiplication, and division. Factors, measures, multiples and cancellation.

Fractions—Proper, improper, mixed numbers, decimal, square root, and powers.

Industrial problems involving common weights and measures, time, work, money, etc.

(*b*) *Percentage*—Simple interest, discount, commission, taxes, profit and loss, principles of insurance. Special emphasis on problems likely to arise in farm practice.

(*c*) *Mensuration*—To be applied mainly on problems arising in farm and household experience.

Areas—Rectangle land areas, building construction, painting, papering, plastering, shingling, paving, triangle (including right-angled triangle) and circle.

Volumes—Rectangular solids, cylinder, etc.

(*d*) *Graphs*—The principles and uses of graphs in presenting statistics. Simple charts.

Text: "Public School Arithmetic."

Second Year

Three lectures a week during term

(*a*) Thorough review of (*a*) of first year. Use modern commercial methods and teach short cuts and contracted methods.

(*b*) *Mensuration*—Practical problems on the triangle, circle, rectangle, trapezium, rectangular solids, cylinder, cone, frustum of cone, frustum of pyramid, sphere, prisms.

(*c*) *Percentage*—Simple and compound interest with use of tables, commission, profit and loss, trade discount, bank discount, taxes, duties and customs, principles of insurance.

(*d*) *Industrial Problems*—Problems involving buying and selling operations with grain, livestock, and other farm products. Building construction, fencing, feeding, etc. Estimating costs, materials, etc.

(*e*) *Graphs*: Review principles of graphs as in (*d*) of first year. Use and construction of graphs and charts, dairy and egg charts, bar diagrams. Graphs connecting two variables such as time and temperature.

Text: "High School Arithmetic."

Farm Mechanics

First Year

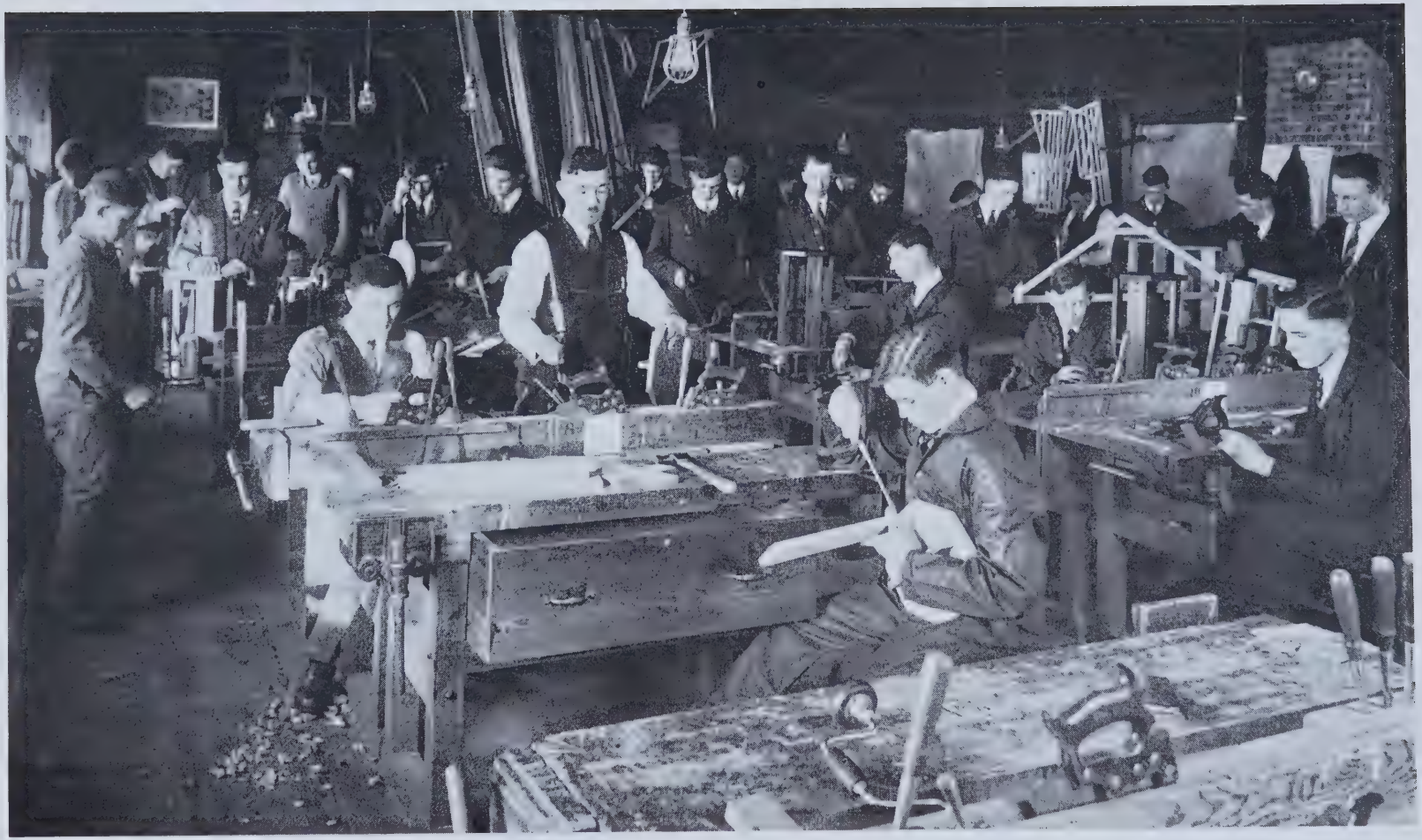
(*a*) *Concrete Work*—Three lectures and five laboratory periods during term.

Composition and nature of cement. Methods of mixing and placing; form construction. The laboratory work will include the making of concrete posts, sidewalk blocks, laying cement floors, etc.

(*b*) *Carpentry*—Twenty-four laboratory periods during term.

Lectures on tools and materials. Shop work will include the following: Squaring up stock, chamfering, the manufacture of coat

Class in Surveying, Olds



First Year Carpentry Class, Olds

hangers, nail boxes, book stalls, taborets, mortise joints, the cutting of rafters. Supplementary exercises will be offered as follows: Trestles, hall tree, milk stool, hand-sleigh, step ladder, neck yoke and whiffle-trees. The aim of this course will be to familiarize the student with the care and use of tools and at the same time produce useful articles.

(*c*) *Blacksmithing*—Twenty-four laboratory periods during the term.

Lecture on tools, materials and the care and manipulation of the fire. The forge practice will include the making of staples, gate hook, chain links, welded rings, whiffle-tree irons, neck yoke irons, two-piece weld, wagon hammer, cold chisel, hand punch, centre punch, and cape chisel. Supplementary exercises will also be made if time permits. These will include fire tools, harness hooks, flat wrench, hay hook, etc.

(*d*) *Gas Engines and Farm Motors*—Fourteen lectures and nine laboratory periods during term.

Lectures on the two-stroke cycle and four-stroke cycle types of engines; single and multiple cylinder types; fuels, carburetors, ignition systems, lubrication, cooling, governing, valve and ignition timing, gas engine troubles, brake tests, and a discussion of initial operating and maintenance costs and allowance for depreciation, principles of power transmission.

Brief study of gas tractor, considering type of engine, speed, transmission, convenience for belt and field work, care and upkeep problems.

The laboratory work will include the operation of small stationary engines, automobiles and tractors, and the location of troubles; Prony brake test. Electricity in connection with cells, induction coils and magnetos will also be dealt with.

(*e*) *Mechanics of Farm Machinery*—Seventeen lecture periods and six laboratory periods during term.

This course will include lectures on the type, care, adjustment and operation of the more common farm machines, such as the plow, drill, mower, and binder. Three laboratory periods will also be given to practical work in tying knots, splicing rope, and belt lacing.

Bulletins and current publications on farm motors and machinery will be utilized throughout the course.

Second Year

(*a*) *Mechanical Drawing*—Seventeen periods during term.

Proper use of drawing instruments, exercise sheets emphasizing accurate measurements, angles, curves, and tangents.

Working drawings of shop projects, embracing orthographic, isometric, and cabinet projections.

Geometric constructions having practical applications will be taught incidentally. The drafting of plans for combination barns suitable for quarter-section or half-section farms.

(*b*) *Carpentry and Buildings*—Seventeen lectures and seventeen laboratory periods during term.

The lectures will be on the location, plans, and methods of construction of farm buildings, heating, lighting, ventilation, sanitation, water supply, storage, and pumping machinery.

The laboratory periods will be devoted to practical work in the carpentry shop. The regular exercises will consist of the following: 1, Timber splice; 2, Cutting rafters for gambrel and Gothic-roofed barns; 3, Small piece of furniture, ironing board, and wagon jack.

Supplementary exercises will be given pupils showing unusual ability.

(*c*) *Blacksmithing*—Seventeen laboratory periods during term.

This will include more advanced forging and tool steel work. The exercises will include the following: Review in welding, wrecking or claw bar, preparation of horse-shoes, plowshare work, filing and key-fitting, soldering, brazing, babbiting, and pipe-fitting.

Poultry Husbandry

First Year

(*a*) *Principles of Housing*—The construction of poultry houses; interior fixtures and poultry appliances.

(*b*) *Natural and artificial incubation.*

(*c*) *Rearing*—The feeding and management of young growing stock.

(*d*) *Feeds and Feeding*—Laying rations, maintenance rations, fattening rations.

(*e*) *Winter Egg Production*—Methods of feeding, care and general management.

(*f*) *Fattening*—Methods of finishing; market requirements, killing, dressing, and packing.

(*g*) *Breeding*—Strain building; the care and management of breeding stock.

(*h*) A study of the factors influencing internal egg quality; co-operation as applied to the marketing of eggs and poultry.

Second Year

Seventeen lectures and ten practical periods during term

(*a*) A review of first year work.

(*b*) Hygiene and sanitation in relation to poultry culture.

(*c*) *Poultry Breeding*—A study of the principles of breeding, strain building, flock culling.

(*d*) *Breeds*—A study of the principal utility breeds, their distinguishing characteristics and adaptability to local conditions.

(*e*) *Diseases*—The common diseases of poultry, their cause, prevention and cure.

(*f*) *Turkeys, Ducks, Geese*—Methods of breeding, feeding, care and management.

Practical Work

(*a*) *Judging Fowls*—A study of egg type and meat type; the utility and score card; practice in the judging of utility classes.

(*b*) *Egg Candling*—Practice in the candling of market eggs, using the official Canadian grade standards.

(*c*) *Crate Fattening*—Actual practice in crate fattening, killing, plucking, and packing market poultry.

(*d*) *Incubator Practice*—Actual operation of an incubator during the period of the course.

Physics

Two lectures and one laboratory period per week during term

Physics—

1. The metric system. Physical measurements.
2. Fluid pressure. Pascal's law. Artesian wells.
3. The buoyancy of fluids. Flotation. Density determinations.

The Hydrometer—

4. Pressure in gases. Weight and pressure in air. The barometer.
5. Boyle's laws. Buoyancy in gases. Balloons.
6. Air pumps and compressers. Water pumps, lift and force.

Siphons.

7. Properties of matter. The molecular theory. Diffusion, osmesis, cohesion and adhesion, surface tension, capillarity.

Mechanics—

8. Elementary mechanics of solids, velocity, acceleration, motion under gravity.
9. Inertia, momentum, force. Parallelogram of forces.
10. Moments of force. Units of force.
11. Gravitation. Work, energy and power.
12. Centre of gravity. Friction.
13. Machines: Levers, pulleys, systems of pulleys; wheel and axle, inclined plane, screw, wedge. Discussion of the machines to be made as practical as possible in application.

Electricity—

14. Magnetism, magnets, and their fields; terrestial magnetism.

15. Electrification, induction, lightning rods.

16. Electric currents. The voltaic cell. Dry cells.

17. Electrolysis. Storage cells.

18. Electro-magnetism, telegraphs, electric bells.

19. Induced currents. The principle of the dynamo.

20. Alternating and direct currents, motors, transformers.

21. Induction coils. The telephone. Heating and lighting effects of an electric current.

Text: "Ontario High School Physics."

Second Year

One lecture period per week during term

Heat—

1. Heat, its nature and source.

2. Expansion, compensated pendulums, thermostats.

3. Temperature scales and measurement. Thermometers, maximum and minimum.

4. Co-efficient of expansion of solids. Expansion of gases. Charles' law.

5. Measurement of heat. Specific heat. Change of state.

6. Heat of fusion. Boiling point. Vapor pressure. Heat of vaporization. Refrigeration.

7. The mechanical equivalent of heat.

8. Conduction, convection and radiation.

Meteorology—

9. Sources of meteorological information. Temperature of the air, direction and velocity of the wind, humidity, rainfall, evaporation, cloudiness and sunshine, pressure of the atmosphere. The measurement of meteorological elements with a discussion of the apparatus used.

10. The causes of atmosphere changes and a study of climatic factors, with special reference to the Canadian and Alberta climates.

Sound—

11. Wave motion. Sound, its source, production and velocity. Vibrations of strings, rods, plates and air columns, reflection and absorption, application to musical instruments.

Text: "Ontario High School Physics."

Soils

SECOND YEAR

One lecture, one laboratory period per week

1. Soil formation.
2. Classification of soils.
3. Physical properties; particles, apparent and real; specific gravity, texture, structure.
4. Soil air.
5. Organic matter.
6. Color of soils.
7. Soil water:
   (*a*) Method of determining and expressing amount in soils.
   (*b*) Requirements of plants.
   (*c*) Kinds of water, capillary, hygroscopic, free.
   (*d*) Control.
8. Soil heat.
9. Soil fertility.
10. Manure and fertilizers.
11. Alkali and acid soils.
12. Soil and subsoil in humid and arid regions.
13. Soil management.

Reference: "Soils, Their Properties and Management," by Lyon, Fippin and Buckman.

Veterinary Science

FIRST YEAR

Thirty-four lectures during term

1. *Lameness—*

Anatomy of foot and leg (names of bones and location), diseases of bones (periositis, ostitis, and exostosis), splints, ringbone, spavin, sidebones.

2. *Diseases of Joints—*

Windgalls, bog spavin, thoroughpin, open joint.

3. *Diseases of Muscles and Tendons—*

Sprains, lameness of the shoulders, hip lameness, knuckling of fetlock, spring knees, curb, capped elbow, capped knee, capped hock, interfering, string-halt.

4. *Diseases of the Foot—*

Calk wounds, thrush, corns, punctured wounds of the foot, contracted heels, sandcracks, navicular disease, laminitis, luxation of patella.

5. *The Examination of a Sick Horse—*
Pulse, temperature, respiration.

6. *The Diseases of Digestive Organs—*
Choking (cattle and horses), colic, diarrhoea (horses and cattle), bloating (cattle), depraved appetite (cattle), indigestion in calves, wounds (wire cuts).

7. *Miscellaneous—*
Hygiene of pregnant animal, diseases of pregnancy, indications of pregnancy, symptoms of parturition.

SECOND YEAR

Thirty-four lectures during term

1. *Teeth—*
Diseases of teeth (irregularities of teeth, toothache, deformity of teeth), telling age by the teeth.

2. *Diseases of Respiratory Organs—*
Distemper, sore throat, congestion of the lungs, pneumonia (horses and cattle).

3. *Diseases of Generative Organs—*
Abortion (mares), care prior to parturition (mares and cows), difficult parturition (mares and cows), congestion and inflammation of the udder (mares), navel-ill of foals.

4. *Diseases of the Eye—*
Conjunctivitis, recurrent ophthalmia.

5. *Diseases following Parturition—*
Retained afterbirth (cattle), milk fever (cattle), congestion of the udder, mammitis.

6. *Diseases of the Digestive Tract—*
Organs of digestion and their functions, indigestion, diarrhoea, impaction.

7. *Small Surgical Operations—*
Trimming bull's feet (how to cast the animal), ringing the bull, dehorning, rumenotomy.

8. *Diseases of the Skin—*
Ringworm, mange (cattle), lousiness.

9. *Miscellaneous—*
Foot rot, foreign bodies in the eye (cattle), tuberculosis, actinomycosis, bots, warbles.

Physical Culture

Attention will be given to physical development throughout the course.

HOME ECONOMICS

Courses of Study

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First Year Girls' Cooking Class, Vermilion

Cooking

First Year

Three laboratory periods per week during entire term

1. *General Introduction to the Course*—
   (1) Purpose of food study.
   (2) Laboratory habits.
      (*a*) Personal neatness and cleanliness.
      (*b*) Neatness and cleanliness in work.
      (*c*) Accurate and careful work; measurements.
      (*d*) Dishwashing; care of towels and cloths.
      (*e*) Care of laboratory.

2. *Beverages*—
   Water, tea, coffee, cocoa, chocolate.
   Experiments to show tannic acid content of tea and coffee when made by various methods.

3. *Fruits*—
   Fresh fruits uncooked.
   Fresh fruits cooked.
   Dried fruits (comparative value with fresh fruit).

4. *Cereals and Cereal Products*—
   Prepared breakfast foods.
   Unprepared breakfast foods (use of fruit with cereal).
   Left-over cereals.
   Rice, tapioca, sago and corn starch pudding.

5. *Candy* (at Christmas time)—
   Degrees of boiling syrup.

6. *Vegetables*—
   (*a*) Cooking of early or green vegetables: Celery, spinach, onions, cabbage, cauliflower, string beans, green peas, etc.
   (*b*) Cooking of starchy vegetables: Carrots, beets, parsnips, turnips, squash, baked beans, etc.
   (*c*) Potatoes: Creamed, scalloped, mashed, baked, fried, etc.
   (*d*) Left-over vegetables: Baked, creamed, scalloped, sauted, etc.

7. *Salads*—
   The value of a salad; salad dressing, boiled, French, mayonnaise; simple salads of vegetables, fruit and meats.

8. *Milk*—
   Principles of cooking.
   Curdling and coagulation enzymes.
   Junket, white sauce, custards, etc.

9. *Eggs—*

Soft-cooked, hard-cooked (experiments to show best method), poached, fried, omelet, souffles, etc.

10. *Cheese—*

Principles involved in cooking; souffle, fondue, Welsh rarebit, red bunny, macaroni and cheese.

11. *Meat—*

Principles involved in the cookery; use of charts showing location of cuts; full lessons on beef and veal, pork, mutton and lamb.

Poultry: Internal organs.

Fish: Classification, boning, baked, steamed, boiled, fried.

Fish sauces: Tartar sauce, sauce tartar, hollandaise, etc.

Left-over meat and fish: Meat loaf, croquettes, creamed, pie, scalloped salmon, etc.

12. *Soup—*

Nutritive value, principles involved in cookery; clear soups, cream soups, puree, etc.

Soup accompaniments.

13. *Use of Fats—*

Temperatures of fat. Deep fat frying; croquettes, fritters, shadow potatoes, French fried potatoes.

14. *Table Service—*

(*a*) Styles of service.
(*b*) General rules for laying covers.
(*c*) General rules for serving and removing courses.
(*d*) Duties of hostess and guest.
(*e*) Table etiquette.

15. *Breakfast Menu—*

Food principles of breakfast menu. Planning breakfast menu; serving breakfast menu; discussion of breakfast menu.

16. *Luncheon Menu—*

Food principles of luncheon menu; planning luncheon menu; serving luncheon menu; discussion of luncheon menu.

17. *Banquet—*

Planned and prepared by first year girls for the graduating class. If there is time a dinner should be planned and served.

SECOND YEAR

Three laboratory periods per week during entire term

(*a*) *Canning—*

1. Canning Fruits: Methods of preservation, selection and preparation, sterilization and filling jars. Methods of canning peas, crabs, apples.

2. Canning Vegetables: General remarks. Canning of various vegetables.

3. Pickling: Spices, recipes, beets, mustard pickles, cabbage and cauliflower.

4. Jelly-making and Preparation: Selection of fruit; essentials for jelly-making; characteristics of good jelly; sealing jelly. General rules. Cranberries, apples.

5. Marmalade.

(*b*) *Review—*

Methods of cooking; study of good flour mixtures.

(*c*) *Flour mixtures—*

Classification:

1. Thin Batters:

Griddle cakes, waffles, fritters, pop-overs.

2. Thick Batters:

Cake; butter cakes, plain, rising sweet and sour milk, plain with variations, as spice, chocolate, nut, etc. Gingerbread, cakes without butter, angel food, sponge cake, jelly roll.

Cake frostings, fillings, glazing and decoration, preparation of Christmas cakes, almond paste, candy at Christmas.

Drop cookies; oatmeal, date, hermits, meringues, macaroons, etc.; cream puffs.

Puddings; steamed and batter, sweet puddings, pudding sauces.

Muffins; plain and variations.

3. Soft Doughs:

Biscuit; plain and variations, as cinnamon rolls, nut and raisin rolls, individual coffee and short cakes, etc., doughnuts and crullers.

4. Stiff Doughs:

Rolled cookies; general cookie recipe; wafers, ginger snaps, oatmeal, etc., pastry and pie fillings; plain pastry, flaky pastry, cheese straws, tarts.

5. Bread:

General principles. Discussion of flour, yeasts, and methods (long and short process), white bread, graham bread, rye bread, cornmeal bread, nut bread, raisin bread.

Rolls: Parkerhouse, Chelsea buns, Swedish tea ring, coffee cake, raised doughnuts, cinnamon buns.

(*d*) *Desserts—*

Gelatine desserts, classification and preparation. Frozen desserts: Ices, plain water ice, sherbet, punch, frappes, ice creams, plain custard, gelatine and cereal mousses, parfaits, frozen puddings.

(*e*) *Salads*—

Gelatine salads, frozen salads; attractive ways of serving. Salad accompaniments.

(*f*) *Entrees*—

General remarks. Timbales, canapes, fritters, croquettes, souffles. Moulded meats, aspic jelly, quick aspic, tomato aspic. Methods of moulding and decorating.

(*g*) *Refreshments*—

Special occasions: Afternoon tea or reception, evening refreshments, buffet luncheon or supper. Discuss methods of serving and suitable menus, linen, china, etc. Prepare refreshments for type of occasion, if possible.

Review: Plan and prepare spring exhibit.

(*h*) *Planning of Food*—

Picnic, if time. Packing of picnic basket. Outdoor cooking; building fires, device for supporting kettles, etc., stones, tripods, iron rods, supported in some way. Cooking of special things as potatoes, bacon, coffee, etc.

Foods

First Year Only

Three lecture periods per week during entire term

1. *Food*—
   Definition. Four tests; uses to the body; classification.
2. *Water*—
   Value; sources; impurities; kinds; uses to the body.
3. *Mineral Matters*—
   Sources; uses.
4. *Fruits*—
   Classification; composition, vitamine content; characteristics; effect of cooking on fruit; digestibility; use of flavor fruits.
5. *Acids*—
   Kinds; sources; uses.
6. *Carbohydrates*—
   Sugar: Characteristics; sources, kinds (sucrose, glucose, etc.); dietary value.
   Starch: General remarks. Sources; uses; effect of cooking on starch; digestibility of corn starch; pectin bodies.
7. *Cereals*—
   General remarks. Cereal products; digestibility.

8. *Vegetables*—
Classification; nutritive value and vitamine content; characteristics; effects of cooking; effect of cooking on vitamine; digestibility.

9. *Cellulose*—
Characteristics; uses.

10. *Nitrogenous Compounds*—
Proteins; classification; sources; characteristics of different classes; digestibility.

11. *Milk*—
Kinds; composition; nutritive value; effects of cooking; digestibility; why not always pure; why it contains so many bacteria.

12. *Milk Products*—
General composition; nutritive value.
Butter: Kinds; composition; nutritive value.
Cheese: Classes; composition; nutritive value.

13. *Eggs*—
General composition; digestibility and flavor; nutritive value; marketing and care of eggs; test of eggs.

14. *Fats*—
Kinds; source; use; digestibility.

15. *Meat*—
Characteristics; digestibility and palatability; effect of cooking; composition; nutritive value; economic value.

16. *Fish*—
Food value; economic value; general composition.

Dietetics

SECOND YEAR ONLY

Two lecture periods per week during entire term

1. Review of the digestive system.
2. Determining food values.
3. Vitamines.
4. Deficiency diseases.
5. Dietaries under normal conditions.
6. Modification of diet.
7. Feeding infants.
8. Feeding children.
9. School lunches.
10. Feeding in adolescence.
11. Feeding in old age.
12. Diet in abnormal conditions, such as malnutrition, diabetes, tuberculosis, obesity, etc.

Home Nursing

First Year

Anatomy and Physiology—Seventeen lecture periods during term

1. Framework of body: Skeleton, bones, joints.
   Muscular system: Relation to skeletal system.
   Circulation system.
   Respiratory system.
   Digestive system.
   Excretory system.
   Nervous system.

Each topic to be discussed from the point of view of function and hygiene.

Home Nursing—Seventeen laboratory periods during term.

1. Preparation of Sick Room—
   The choice, furnishings and care of room.
2. Bed-making—
   (*a*) Making of bed for bed patient.
   (*b*) changing of bed linen with helpless patient in bed.
   (*c*) Changing of bed linen after cases of intestinal hemorrhage.
   (*d*) Preparation of fracture bed.
   (*e*) Changing of mattress with patient in bed.
3. Care of Patient—
   (*a*) Care of hair, teeth, nails, etc.
   (*b*) The bathing of a patient.
   (*c*) How to avoid bed sores.
   (*d*) The use of sickroom appliances.
   (*e*) The giving of enemas, etc.
   (*f*) Feeding the patient.
4. Sponging for reduction of temperature.
5. How to administer cold and hot packs. When and for what purpose they should be given.
6. The proper method of making and applying poultices, fomentations, stupes, etc.
7. Taking of temperature, pulse, and respiration.
8. Administration of Medicines—
   (*a*) Care of medicines.
   (*b*) Measuring.
   (*c*) Rules to be remembered in giving medicines.
   (*d*) The different methods of giving medicines, viz.: Hypodermic, epidermic, etc.

8. *Vegetables*—
Classification; nutritive value and vitamine content; characteristics; effects of cooking; effect of cooking on vitamine; digestibility.

9. *Cellulose*—
Characteristics; uses.

10. *Nitrogenous Compounds*—
Proteins; classification; sources; characteristics of different classes; digestibility.

11. *Milk*—
Kinds; composition; nutritive value; effects of cooking; digestibility; why not always pure; why it contains so many bacteria.

12. *Milk Products*—
General composition; nutritive value.
Butter: Kinds; composition; nutritive value.
Cheese: Classes; composition; nutritive value.

13. *Eggs*—
General composition; digestibility and flavor; nutritive value; marketing and care of eggs; test of eggs.

14. *Fats*—
Kinds; source; use; digestibility.

15. *Meat*—
Characteristics; digestibility and palatability; effect of cooking; composition; nutritive value; economic value.

16. *Fish*—
Food value; economic value; general composition.

Dietetics

SECOND YEAR ONLY

Two lecture periods per week during entire term

1. Review of the digestive system.
2. Determining food values.
3. Vitamines.
4. Deficiency diseases.
5. Dietaries under normal conditions.
6. Modification of diet.
7. Feeding infants.
8. Feeding children.
9. School lunches.
10. Feeding in adolescence.
11. Feeding in old age.
12. Diet in abnormal conditions, such as malnutrition, diabetes, tuberculosis, obesity, etc.

(*b*) Kitchen planning.
(*c*) Labor-saving devices.
(*d*) Cleaning—

1. Choice, cost and care of cleaning utensils, as brooms, brushes, carpet sweepers, etc. Discussion of cleaning agents, soaps, Bon Ami, Dutch Cleanser, commercial preparations.
2. Cleaning Processes:
   (1) Wood-work and Floors; refer to cards Nos. 3, 24, 12, 1, 31, 11, 38.
   (2) Walls—No. 27.
   (3) Furniture Polishing—Nos. 2, 9, 34.
   (4) Daily Cleaning—Nos. 15, 6, 16, 22, 23.
   (5) Cleaning Windows and Shades—Nos. 18, 13.
   (6) Stoves—Nos. 35, 8, 28, 10.
   (7) Sinks—Nos. 7, 32, 33.
   (8) Metals—Nos. 26, 5, 17, 19, 20, 21.
   (9) Cupboards—No. 25.

Meal-Serving, Home Economics Class, Olds

(*e*) Repairing household linens, as worn sheets, tablecloths, etc., mending rugs and carpets, refinishing old furniture, care of bedding, pillows, blankets and mattresses.

Second Year

Two lectures and one laboratory period per week during term

1. Short history of the family.
2. Evolution of the home.
3. Relation of home to community.
4. Housekeeping as a profession.
5. House-planning—
   (*a*) Analysis of house.
   (*b*) Arrangement of rooms.
   (*c*) Finishes.
   (*d*) Decorations.
   (*e*) Furnishings.
6. History of Furniture.
7. Domestic Rugs.

Practical Work

Furnishing a farm home or bungalow on limited amount of money. Discussion of house plans.

Marketing—

(*a*) Methods of purchase.

(*b*) Bargains.

(*c*) Proper selection and economic buying of fruits, vegetables, meats, poultry, fish and canned goods.

Household Accounts—

(*a*) Household budget and division of income.

(*b*) Systems of keeping accounts.

(*c*) Practical work in home accounts.

(*d*) Banking for the housewife.

(*e*) Simple business forms: Receipt, cheque, order, promissory note, due bill.

Laundering

First Year Only

One lecture and one laboratory period per week during term

1. *Aims.*
2. *Water—*

   Source, purity and impurities, uses, classes and softening of hard water.
3. *Removal of Stains—*
   - (*a*) Rules.
   - (*b*) Common stains and their removal.
4. *Laundering of Fabrics—*
   - (*a*) Cotton:
     - (1) Various processes employed in laundering white and colored cottons.
     - (2) Starch, blues and bluing. Source, uses, kinds, methods of using.
     - (3) Mordants and soap substitutes. Kinds, methods of using.
   - (*b*) Linens:
     - (1) Characteristics, bleaching, processes employed.
     - (2) Ironing and folding of tablecloths and napkins.
   - (*c*) Woollens:
     - (1) Aim, rules, processes employed, causes of shrinkage.
     - (2) Washing of woollen blankets.

Class in Laundering, Olds

(*d*) Silk:

(1) Sources, classes, culture, rules for washing, processes employed in laundering soft and stiff silks, velvets, laces and fancy work.

(*e*) General wash, including all four fabrics:

(1) Various methods of washing.

(2) Procedure and processes employed.

5. *Dry Cleaning*—

(*a*) Materials and methods used.

(*b*) Advantages and disadvantages.

(*c*) Cleaning various fabrics, kid gloves, kid or satin slippers, furs, feathers and light colored felts.

6. *Soap-making*—

(*a*) Cold and boiled soap.

(*b*) Composition, fats used, adulteration, purchasing.

Sanitation

First Year Only

One lecture per week

Ventilation, heating, lighting, plumbing, disposal of household wastes, care of food, adulterations of food, household pests and their eradication, disinfection.

Sewing

First Year

Clothing—Four laboratory periods per week during term.

Sewing—

1. Instruction in knowledge of equipment and its use.

(*a*) Use and care of sewing machine.

(*b*) Explanation of sewing terms and use of tools.

2. Instruction in sewing processes, stitches, seams, finishes, buttons, button-holes, plackets; and patching, darning.

3. Uses and modifications of commercial patterns.

4. Making set of undergarments, plain cotton, middy blouse, cotton summer dress.

5. Consideration in selection of material—
   (*a*) Purpose.
   (*b*) Cost and durability.
   (*c*) Laundering qualities.
   (*d*) Width and amount.
6. Simple embroidery stitches.

Second Year

Clothing—Three laboratory periods per week during term.

1. Continuation of instructions on sewing processes, tailored seams, seams, plackets, bound button holes, decorations.

2. Alterations and adaptations of patterns. Freehand cutting of collars, cuffs, belts, pockets, etc.

3. Construction of garments, tailored waist, tailored skirt, made-over garment, graduation dress, infant layette.

4. Instruction in the fitting of costumes.

5. Paper dress forms.

Second Year Sewing Class, Olds School of Agriculture

Textiles

First Year

Two lectures per week during term.

1. Study of fabrics, cotton, linen, wool, and silk.
   (*a*) Characteristics.
   (*b*) Sources.
   (*c*) Manufacture.
   (*d*) Tests for—
      (1) Quality.
      (2) Adulterations.
      (3) Substitutes.
2. Study of laces.

Clothing and Design

Second Year

One lecture per week during term

1. History.
2. Basic principles of clothing design, as color, line, form, texture, etc.
3. Application of principles to individual type.
4. Types of costume (house, school, street, business, afternoon, evening).
5. Economic aspect of clothes. This includes the ethics of shopping.
6. Study of clothing budgets.

Practical Work

Note book illustrating principles of costume designs.

Dairying

First Year

See outline for Agricultural Students. Page 29.

Second Year

See outline for Agricultural Students. Page 29.

Bacteriology

Second Year Only

See outline for Agricultural Students.

Chemistry

First Year

See outline for Agricultural Students.

Second Year

Six lectures and three laboratory periods during term in addition to present outline for second year boys, covering—

(*a*) *Textiles*—Wool, silk, cotton and linen. Identification and tests for fibres.

(*b*) *Soap*—Hard water and methods of softening.

(*c*) *Butter and oleomargarine tests.*

(*d*) *Leavening Agents*—Baking powders and baking soda.

English

First Year

See outline for Agricultural Students.

Second Year

See outline for Agricultural Students.

Horticulture

First Year

See outline for Agricultural Students.

Second Year

See outline for Agricultural Students.

Civics

Second Year

See outline for Agricultural Students.

Mathematics

First Year

See outline for Agricultural Students.

Second Year

See outline for Agricultural Students.

Poultry

First Year

See outline for Agricultural Students.

Second Year

See outline for Agricultural Students.

Outfit Requirements

1. Uniforms must be worn at all practical classes.

2. Two uniforms are required for practical work in the kitchen and laundry. The pattern and material for uniforms may be purchased at the Schools of Agriculture. In ordering pattern, kindly state bust measurement.

3. The uniforms are made of blue and white galatea, with white organdie collar and cuffs. Students are requested to make uniform precisely as indicated by style. The skirt should measure twelve inches off the floor, and should be finished with a 4-inch hem. The sleeves of uniform should be short. The neck and sleeves should be finished with narrow bands, to which may be attached a plain white collar and cuffs.

4. *Aprons*—An all-over apron of same material as uniform should be provided for wearing during practical classes in Household Administration.

5. Three aprons are needed for cooking. These are made of 72-inch sheeting obtained at the school. The pattern also may be obtained at the school.

6. Hair nets must be worn in Cookery class if hair bobbed.

7. *Hand Towels*—Four small white towels, each half a yard long, having a buttonhole or tape with which to fasten to band of apron.

8. *Pot-holders*—Two, six inches square, covered with glass towelling material, bound with white tape. The holder should have attached to one corner, three-quarters of a yard of white tape with which to fasten holder to apron band.

Suits for Physical Culture

Bloomers—One pair of navy blue serge bloomers. The material and pattern may be procured at school. These bloomers may be made after arrival at the school. A white middy blouse is worn with bloomers.

Sewing Requisites—Each student must have a large work bag equipped with scissors, tape line, needles, thimbles, pins.

The students supply their own material for sewing class, but keep the finished articles for their own use.

The students are requested to have their names worked plainly on aprons and towels.

General Rules—While not in practical classes, white middy blouse and blue skirt may be worn in preference to uniforms, if desired.

Each student should be provided with one pair of low-heeled shoes. Silk stockings are not to be worn during school hours.

Elaborate styles of hair dressing are discouraged. Prefer hair to be neatly and plainly dressed.

Excessive use of face powder is undesirable.

Absolutely no jewelry is to be worn in practical classes.

Students' Council, 1925-26, Claresholm School

APPLICATION FOR ADMISSION TO SCHOOL OF AGRICULTURE

.....P.O.

Date.....

THE PRINCIPAL,
School of Agriculture.

Sir:

I hereby apply for admission to the..... School of Agriculture. If admitted, I agree to abide by the rules and regulations outlined in the School Calendar.

Yours truly,

.....

(*Name of Applicant*).

CARD OF INFORMATION

Name in full.....

Home address .....

Age .....

Place of Birth.....

Do you smoke or chew tobacco?.....

Do you use intoxicating liquors?.....

What is your church preference?.....

Parent or guardian:

(*a*) Name.....

(*b*) Address.....

(*c*) Occupation.....

Education: Length of attendance in—

(*a*) Public School.....

(*b*) High School.....

(*c*) Other schools.....

Practical work on farm (for boys only)—

(*a*) Date.....

(*b*) Place.....

Please state whether board and room will be required in the Town of Olds, Claresholm or Vermilion during the school term.

(*Kindly Return Promptly*)